

### REMARKS

Claims 1-3, 18-20 and 22-35 are pending in the case. The Applicants have amended claim 1 to particularly point out and distinctly claim the subject matter that the Applicants regard as their invention. Moreover, the Applicants have cancelled claims 3, 18, 19 and 20, without prejudice. Indeed, the Applicants reserve their rights to reinstate the subject matter of said claims during the pendency of the present application. Support for the present amendments is found throughout the specification and claims, as originally filed. No new matter has been added and no additional claims fees are believed to be due. The Applicants strongly believe that the present amendments have placed the application in condition for allowance. Accordingly, the Applicants respectfully request timely and favorable consideration of the present communication.

#### Rejection under 35 USC § 103(a) over Fowler in view of Schulein

The Examiner has rejected claims 1-3, 18-20 and 22-35 under 35 USC § 103(a) as allegedly obvious over US Patent Number 6,268,196 to Fowler et al (hereinafter "Fowler") in view of US Patent Number 6,117,664 to Schulein et al (hereinafter "Schulein"). The Examiner's rejection is respectfully traversed. The Applicants respectfully direct the Examiner's attention to the "Amendments" section of the instant paper, in which the Applicants have amended claim 1, from which the balance of the rejected claims ultimately depend, to remove the recitation of "*E. coli* OmpA gene-CiP linker," as a suitable linking region for the modified enzyme disclosed therein. Indeed, the Examiner has asserted that it is the above-listed references' purported disclosure of a proline-rich linking region, such as the CiP linker of *E. coli*, that forms the basis of the present rejection (See Paper No. 9; Page 3). In light of the present amendments, the Applicants respectfully submit, and strongly urge, that Fowler in view of Schulein neither teach nor suggest a modified enzyme comprising a catalytically active amino acid sequence with a highly specific linking region selected from the group set forth in amended claim 1. The Applicants have amended claim 1 and cancelled claims 3, 18, 19 and 20, without prejudice, only to expedite allowance of the present case and, if necessary, to minimize issues on Appeal. Accordingly, reconsideration and withdrawal of the rejection to claims 1, 2 and 22-35 under 35 USC § 103(a) are therefore respectfully requested.

CONCLUSION

Attached hereto at the conclusion of this communication is a separate sheet entitled "Version With Markings To Show Changes Made." Applicants have made an earnest effort to place the present claims in condition for allowance. WHEREFORE, entry of the amendments provided herewith, reconsideration of the claims as amended in light of the Remarks provided, withdrawal of the claims rejections, and allowance of Claims 1, 2 and 22-35, as amended, are respectfully requested. In the event that issues remain prior to allowance of the noted claims, then the Examiner is invited to call Applicants' undersigned attorney to discuss any remaining issues.

Respectfully submitted,

ALFRED BUSCH, et al

By 

Frank Taffy, Esq.  
Attorney for Applicants  
Registration No. 52,270  
(513) 634-9315

Customer No. 27752

01 November 2002  
Cincinnati, Ohio  
CM1758-AfterFinal.doc

RECEIVED  
CENTRAL FAX CENTER  
SEP 03 2003

OFFICIAL

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

Claim 1 (Twice Amended). A modified enzyme which comprises a catalytically active amino acid sequence derived from a cellulolytic enzyme EGI exhibiting the following properties:

- (e) derived from *Humicola insolens* or *Trichoderma reesei*,
- (f) approximate molecular weight of about 50 kDa,
- (g) iso-electric point of 5.5, and
- (h) containing 415 amino acid;

linked to an amino acid sequence comprising a cellulose binding domain;

wherein said modified enzyme comprises a linking region between said catalytically active amino acid sequence of a cellulolytic enzyme EGI and said amino acid sequence comprising a cellulose binding domain;

further wherein said linking region is an amino acid linking region or non-amino acid linking region; and

further wherein said linking region is selected from the group consisting of: *Humicola insolens* family 45 cellulase linker, Nifa gene of *Klebsiella pneumoniae*-CiP linker, ~~*E. coli*~~ ~~OmpA gene~~-CiP linker, E3 cellulase *Thermomonospora fusca* linker, CenA cellulase linker, nucleophilic polyethylene glycol derivative linker, carboxyl polyethylene glycol derivative linker, electrophilically activated polyethylene glycol derivative linker, sulfhydryl-selective polyethylene glycol derivative linker, heterofunctional polyethylene glycol derivative linker, biotin polyethylene glycol derivative linker, vinyl polyethylene glycol derivative linker, polyethylene glycol silane derivative linker, polyethylene glycol phospholipid derivative linker and mixtures thereof.